

**United States Telephone Association**

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February 3, 1995

**RECEIVED****FEB - 3 1995****FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY**

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street NW - Room 222  
Washington, D.C. 20554

RE: Ex Parte Meeting  
CC Docket No. 94-1

Dear Mr. Caton:

DOCKET FILE COPY ORIGINAL

On Thursday, February 2, 1995, Mike O'Brien and Frank McKennedy, representing the United States Telephone Association (USTA), met with Mark Uretsky, Anthony Bush and Alexander Belinfante of the Commission's Common Carrier Bureau Tariff Division. The purpose of the meeting was to discuss the attached analysis of the data differences between the USTA TFP study filed with the USTA comments in this proceeding and the 1993 updated study place on the record on January 20, 1995. This analysis supersedes a similar analysis provided on the record on January 27, 1995.

An original and two copies of this ex parte notice, the attachment and a machine readable disk which includes the data analysis for gross capital stock, additions and TPI's are being filed in the Office of the Secretary on February 3, 1995 due to the lateness of the meeting on February 2. Please include this notice and attached material in the public record of these proceedings.

Respectfully Submitted

A handwritten signature in cursive script that reads "Mary McDermott".

Mary McDermott  
Vice President and General  
Counsel

cc: Mark Uretsky  
Anthony Bush  
Alexander Belinfante

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A handwritten number "242" in cursive script.

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FEB - 3 1995

UNITED STATES TELEPHONE ASSOCIATION  
EX PARTE FILING, DOCKET NO. 94-1  
SUMMARY OF EXPLANATIONS OF LEC DATA ADJUSTMENTS  
UPDATED 1993 TFP STUDY

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

The following sets out by company the reasons for the adjustments made by each LEC to update the underlying data from the Christensen 1992 TFP Study for the updated 1993 TFP Study. Detail sheets for each company showing the original data submitted for the 1992 study, the 1993 study and the change are attached in the order presented here for each category. For convenience the summary or "composite" sheets for the industry are also attached. These summary sheets were already placed by ex parte on the record in this proceeding.

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<u>Company</u>	<u>Area</u>	<u>Reason for Correction</u>
Ameritech	Gross Stock	In the original study, a reclassification of asset accounts in IOT was missed. It was corrected in the review of data for the 1993 Study.
	Additions	Input error made in IOT for 1992 in the original study.
Bell Atlantic	Gross Stock	Input error made in IOT in the original study.
	Additions	Original data was from a source that did not tie directly to ARMIS.
	TPI's	There were several clerical errors in the TPI's that were corrected in the 1993 study.
Bell South	Billed Revenue	Input and clerical errors were made in both intrastate access revenues and long distance billed revenue in the original study.

UNITED STATES TELEPHONE ASSOCIATION  
EX PARTE FILING, DOCKET NO. 94-1  
CONTINUED

<u>Company</u>	<u>Area</u>	<u>Reason for Correction</u>
NYNEX	Gross Stock	In developing the 1984 capital stock in the original study, TPI's were applied to incorrect book costs. This was corrected in the updated 1993 study.
	Additions	Original data for New York was from a source that did not tie directly to ARMIS.
Southwestern	TPI's	Updated TPI's for the years 1991 and 1992 for the 1993 updated TFP Study.
SNET	Gross Stock	Industry average TPI's were used; therefore, the Gross Stock changed.
	Additions	Clerical Errors
GTE	Gross Stock	In original submission, original cost was used instead of reproduction cost.
	Additions	GTE made an input error for central office equip. in 1992 in the original study.
	TPI's	GTE TPI's were not available for the original study. GTE's TPI's were included in the revised study.
US West	Labor/Materials	Clerical Input Errors
Pacific Tel.	Additions	Clerical error for one item under general support equip. for 1991.

# **CHRISTENSEN LEC TFP STUDY**

## **COMPOSITE**

### **Corrected**

	1984 Gross Capital Stock
Gen Support Equipment	10,555,628,592
Central Office	45,121,017,225
Transmission	32,587,904,198
Information Orig/Term	21,348,220,699
Cable & Wire	101,463,381,363
Buildings	26,558,303,414

### **Original**

	1984 Gross Capital Stock
Gen Support Equipment	10,679,810,645
Central Office	47,664,301,644
Transmission	33,174,973,728
Information Orig/Term	21,422,798,174
Cable & Wire	103,764,732,643
Buildings	28,293,533,366

### **Difference: Corrected - Original**

	1984 Gross Capital Stock
Gen Support Equipment	(124,182,053)
Central Office	(2,543,284,419)
Transmission	(587,069,529)
Information Orig/Term	(74,577,475)
Cable & Wire	(2,301,351,280)
Buildings	(1,735,229,952)

# CHRISTENSEN LEC TFP STUDY

## Ameritech Corrected

	1984 Gross Capital Stock
Gen Support Equipment	1,192,372,556
Central Office	6,805,685,164
Transmission	3,761,037,637
Information Orig/Term	3,571,768,033
Cable & Wire	15,734,914,137
Buildings	4,906,019,270

## Ameritech Original

	1984 Gross Capital Stock
Gen Support Equipment	1,192,372,556
Central Office	6,805,685,164
Transmission	3,761,037,637
Information Orig/Term	3,289,774,277
Cable & Wire	15,734,914,137
Buildings	4,906,019,270

## Ameritech

### Difference: Corrected - Original

	1984 Gross Capital Stock
Gen Support Equipment	0
Central Office	0
Transmission	0
Information Orig/Term	281,993,756
Cable & Wire	0
Buildings	0

# CHRISTENSEN LEC TFP STUDY

## Bell Atlantic Corrected

### 1984 Gross Capital Stock

Gen Support Equipment	1,083,555,665
Central Office	4,196,840,604
Transmission	2,673,876,154
Information Orig/Term	2,420,382,258
Cable & Wire	8,617,758,843
Buildings	1,571,688,675

## Bell Atlantic Original

### 1984 Gross Capital Stock

Gen Support Equipment	1,083,555,665
Central Office	4,196,840,604
Transmission	2,673,876,154
Information Orig/Term	2,428,382,258
Cable & Wire	8,617,758,843
Buildings	1,571,688,675

## Bell Atlantic

### Difference: Corrected – Original

### 1984 Gross Capital Stock

Gen Support Equipment	0
Central Office	0
Transmission	0
Information Orig/Term	(8,000,000)
Cable & Wire	0
Buildings	0

## CHRISTENSEN LEC TFP STUDY

### NYNEX Corrected

#### 1984 Gross

#### Capital Stock

Gen Support Equipment	1,455,667,162
Central Office	6,263,122,384
Transmission	3,661,462,212
Information Orig/Term	1,637,607,789
Cable & Wire	8,668,324,492
Buildings	2,729,392,751

### NYNEX Original

#### 1984 Gross

#### Capital Stock

Gen Support Equipment	1,725,861,000
Central Office	9,436,691,000
Transmission	4,801,462,000
Information Orig/Term	2,683,273,000
Cable & Wire	13,841,612,000
Buildings	5,460,018,000

### NYNEX

#### Difference: Corrected – Original

#### 1984 Gross

#### Capital Stock

Gen Support Equipment	(270,193,838)
Central Office	(3,173,568,616)
Transmission	(1,139,999,788)
Information Orig/Term	(1,045,665,211)
Cable & Wire	(5,173,287,508)
Buildings	(2,730,625,249)

# CHRISTENSEN LEC TFP STUDY

## Southern New England Corrected

	1984 Gross Capital Stock
Gen Support Equipment	265,553,486
Central Office	1,090,803,679
Transmission	379,753,121
Information Orig/Term	104,688,846
Cable & Wire	1,362,728,910
Buildings	484,293,055

## Southern New England Original

	1984 Gross Capital Stock
Gen Support Equipment	281,768,727
Central Office	1,538,446,270
Transmission	5,303,452
Information Orig/Term	74,715,401
Cable & Wire	1,315,900,414
Buildings	574,008,753

## Southern New England Difference: Corrected - Original

	1984 Gross Capital Stock
Gen Support Equipment	(16,215,241)
Central Office	(447,642,591)
Transmission	374,449,670
Information Orig/Term	29,973,445
Cable & Wire	46,828,496
Buildings	(89,715,698)



# **CHRISTENSEN LEC TFP STUDY**

## **GTE**

### **Corrected**

#### **1984 Gross Capital Stock**

Gen Support Equipment	1,188,404,683
Central Office	6,322,402,107
Transmission	2,811,325,069
Information Orig/Term	4,040,510,181
Cable & Wire	9,059,418,088
Buildings	2,314,027,917

## **GTE**

### **Original**

#### **1984 Gross Capital Stock**

Gen Support Equipment	1,026,177,657
Central Office	5,244,475,319
Transmission	2,632,844,480
Information Orig/Term	3,373,389,646
Cable & Wire	6,234,310,356
Buildings	1,228,916,922

## **GTE**

### **Difference: Corrected – Original**

#### **1984 Gross Capital Stock**

Gen Support Equipment	162,227,026
Central Office	1,077,926,788
Transmission	178,480,589
Information Orig/Term	667,120,535
Cable & Wire	2,825,107,732
Buildings	1,085,110,995

CHRISTENSEN LEC TFP STUDY

COMPOSITE

Corrected

	Investment								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	1,594,280,490	1,708,846,671	1,685,236,612	1,719,131,682	2,096,070,814	2,047,017,952	2,064,676,681	1,980,970,822	2,018,916,512
Central Office	3,665,597,022	5,341,401,159	5,380,105,488	4,856,901,601	4,812,588,647	4,106,151,389	4,399,576,201	4,175,097,990	4,478,869,220
Transmission	3,071,454,050	3,702,382,313	3,768,591,379	4,005,468,700	3,663,330,105	3,219,798,496	3,455,150,466	3,725,903,350	3,852,853,264
Information Orig/Term	54,555,049	611,593,108	524,800,766	571,512,220	405,899,977	412,329,581	422,636,845	419,707,088	438,935,292
Cable & Wire	5,897,921,028	5,303,357,658	5,234,388,386	5,147,206,210	4,878,558,892	4,871,967,484	5,546,632,772	5,631,573,760	5,606,208,614
Buildings	843,721,745	1,058,947,663	903,765,059	745,064,850	662,963,815	703,532,487	846,879,640	823,964,107	924,255,204

Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	1,497,410,641	1,718,681,550	1,630,350,874	1,623,260,650	2,041,273,431	2,030,137,234	2,031,261,204	1,954,704,642	2,023,340,941
Central Office	3,792,145,089	4,992,461,372	5,557,922,212	5,052,710,538	4,868,651,937	4,349,992,624	4,620,583,358	4,295,741,493	3,674,535,682
Transmission	3,150,293,195	3,546,006,873	3,814,727,345	3,979,448,216	3,705,295,705	3,212,920,541	3,407,227,239	3,687,903,470	3,793,915,189
Information Orig/Term	(332,659,401)	677,590,145	529,046,430	630,647,817	390,274,749	400,886,627	402,153,627	397,217,102	433,098,204
Cable & Wire	6,059,206,386	5,248,598,793	5,204,129,045	5,112,372,346	4,756,060,196	4,788,365,741	5,388,373,911	5,317,765,858	5,881,355,573
Buildings	844,113,747	1,036,533,590	899,790,451	742,736,123	604,197,830	702,043,135	848,600,939	803,500,242	930,158,521

Difference: Corrected - Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	96,869,849	(9,834,879)	54,885,738	95,871,032	54,797,383	16,880,718	33,415,477	26,266,180	(4,424,429)
Central Office	(126,548,067)	348,939,787	(177,816,724)	(195,808,937)	(56,063,290)	(243,841,235)	(221,007,157)	(120,643,503)	804,333,538
Transmission	(78,839,145)	156,375,440	(46,135,966)	26,020,484	(41,965,600)	6,877,955	47,923,227	37,999,880	58,938,075
Information Orig/Term	387,214,450	(65,997,037)	(4,245,664)	(59,135,597)	15,625,228	11,442,954	20,483,218	22,489,986	5,837,088
Cable & Wire	(161,285,358)	54,758,865	30,259,341	34,833,864	122,498,696	83,601,743	158,258,861	313,807,902	(275,146,959)
Buildings	(392,002)	22,414,073	3,974,608	2,328,727	58,765,985	1,489,352	(1,721,299)	20,463,865	(5,903,317)

CHRISTENSEN LEC TFP STUDY

Ameritech  
Corrected

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	245,397,460	157,592,947	186,769,426	229,817,935	246,668,611	226,288,571	200,069,704	167,014,720	138,792,119
Central Office	333,602,697	542,429,684	592,547,517	543,949,363	509,037,927	573,694,634	478,525,940	524,768,583	451,989,269
Transmission	337,383,027	482,488,732	532,270,380	502,190,714	408,197,911	346,408,437	361,688,259	426,098,954	396,959,014
Information Orig/Term	(174,827,380)	80,190,585	77,518,525	190,564,758	51,099,707	33,697,873	38,596,760	37,695,284	41,012,742
Cable & Wire	824,634,755	532,620,856	541,590,178	387,479,657	521,548,863	566,407,146	620,863,338	592,932,528	579,266,305
Buildings	107,382,902	83,633,611	108,610,955	81,929,288	82,843,914	84,041,069	112,739,920	111,395,620	93,772,791

Ameritech  
Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	245,397,460	157,592,947	186,769,426	229,817,935	246,668,611	226,288,571	200,069,704	167,014,720	138,792,119
Central Office	333,602,697	542,429,684	592,547,517	543,949,363	509,037,927	573,694,634	478,525,940	524,768,583	451,989,269
Transmission	337,383,027	482,488,732	532,270,380	502,190,714	408,197,911	346,408,437	361,688,259	426,098,954	396,959,014
Information Orig/Term	(174,827,380)	80,190,585	77,518,525	190,564,758	51,099,707	33,697,873	38,596,760	37,695,284	35,641,688
Cable & Wire	824,634,755	532,620,856	541,590,178	387,479,657	521,548,863	566,407,146	620,863,338	592,932,528	579,266,305
Buildings	107,382,902	83,633,611	108,610,955	81,929,288	82,843,914	84,041,069	112,739,920	111,395,620	93,772,791

Ameritech  
Difference: Corrected - Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	0	0	0	0	0	0	0	0	0
Central Office	0	0	0	0	0	0	0	0	0
Transmission	0	0	0	0	0	0	0	0	0
Information Orig/Term	0	0	0	0	0	0	0	0	5,371,054
Cable & Wire	0	0	0	0	0	0	0	0	0
Buildings	0	0	0	0	0	0	0	0	0

CHRISTENSEN LEC TFP STUDY

Bell Atlantic  
Corrected

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	165,131,000	205,066,000	242,171,000	274,534,000	318,206,000	289,276,000	388,519,000	342,560,000	238,057,000
Central Office	466,537,000	656,152,000	623,143,000	639,186,000	754,493,000	592,026,000	573,422,000	497,161,000	468,618,000
Transmission	454,214,000	563,521,000	593,125,000	596,810,000	594,280,000	536,217,000	546,707,000	566,458,000	577,370,000
Information Orig/Term	80,323,000	50,355,000	59,313,000	60,889,000	56,795,000	63,623,000	72,906,000	60,324,000	41,735,000
Cable & Wire	601,496,000	609,953,000	622,442,000	723,364,000	673,285,000	686,007,000	744,681,000	733,177,000	664,825,000
Buildings	64,173,000	108,066,000	101,252,000	87,141,000	80,026,000	93,730,000	135,641,000	109,807,000	94,183,000

Bell Atlantic  
Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	163,776,952	184,580,014	237,259,398	184,642,966	254,825,863	304,674,854	371,861,293	344,489,926	239,683,591
Central Office	326,070,239	524,218,854	657,287,787	644,377,644	748,763,877	585,415,600	557,473,955	354,701,260	448,639,637
Transmission	516,864,450	620,826,800	645,449,884	577,495,353	601,209,196	571,297,299	575,150,098	579,279,561	578,586,599
Information Orig/Term	32,064,163	40,225,983	51,606,399	43,968,525	41,203,196	49,868,369	51,705,249	36,112,930	40,681,090
Cable & Wire	605,649,238	615,812,048	643,117,016	739,086,772	673,795,452	689,370,240	736,070,517	537,654,798	1,023,213,770
Buildings	54,992,268	110,079,152	97,544,645	85,843,646	80,251,127	93,904,051	135,338,872	84,877,321	95,623,361

Bell Atlantic  
Difference: Corrected - Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	1,354,048	20,485,986	4,911,602	89,891,034	63,380,137	(15,398,854)	16,657,707	(1,929,926)	(1,626,591)
Central Office	140,466,761	131,933,146	(34,144,787)	(5,191,644)	5,729,123	6,610,400	15,948,045	142,459,740	19,978,363
Transmission	(62,650,450)	(57,305,800)	(52,324,884)	19,314,647	(6,929,196)	(35,080,299)	(28,443,098)	(12,821,561)	(1,216,599)
Information Orig/Term	48,258,837	10,129,017	7,706,601	16,920,475	15,591,804	13,754,631	21,200,751	24,211,070	1,053,910
Cable & Wire	(4,153,238)	(5,859,048)	(20,675,016)	(15,732,772)	(510,452)	(3,363,240)	8,610,483	195,522,202	(358,388,770)
Buildings	9,180,732	(2,013,152)	3,707,355	1,297,354	(225,127)	(174,051)	302,128	24,929,679	(1,440,361)

CHRISTENSEN LEC TFP STUDY

NYNEX  
Corrected

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	127,686,699	187,690,893	106,003,986	108,637,220	77,612,000	71,527,000	107,526,000	101,462,000	147,087,999
Central Office	498,500,123	601,276,504	733,667,734	803,220,186	923,555,000	707,502,000	624,460,000	439,001,000	597,121,000
Transmission	496,046,037	556,321,823	509,759,628	603,328,368	622,862,000	458,790,000	440,108,000	452,313,000	457,982,000
Information Orig/Term	108,945,055	54,015,643	45,917,770	6,836,936	64,677,000	64,821,000	68,844,000	62,896,000	71,027,000
Cable & Wire	560,253,848	601,129,234	603,030,241	642,011,593	620,854,000	551,936,000	862,803,000	805,834,000	752,951,000
Buildings	81,710,325	80,398,254	56,339,199	90,877,496	89,514,000	102,365,000	132,733,000	109,118,000	124,364,000

NYNEX  
Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	32,170,898	218,011,758	56,029,850	102,657,222	85,360,754	27,856,428	97,555,230	87,498,894	146,638,237
Central Office	765,514,951	384,289,863	877,339,671	993,837,479	940,880,413	877,307,635	795,694,202	629,655,843	583,572,925
Transmission	512,234,732	342,640,583	503,570,710	596,622,531	726,729,404	495,142,746	442,331,675	473,674,659	464,272,126
Information Orig/Term	(230,010,558)	130,141,697	57,870,035	82,893,008	64,443,576	69,473,677	69,895,533	65,926,384	73,545,076
Cable & Wire	717,385,968	540,511,321	552,095,884	591,444,957	532,887,852	469,552,017	716,052,622	683,912,600	670,781,189
Buildings	91,283,059	55,971,029	56,071,946	89,846,123	29,206,888	100,862,597	133,022,427	109,516,414	122,712,856

NYNEX  
Difference: Corrected - Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	95,515,801	(30,320,865)	49,974,136	5,979,998	(7,748,754)	43,670,572	9,970,770	13,963,106	449,762
Central Office	(267,014,828)	217,006,641	(143,671,937)	(190,617,293)	(17,325,413)	(169,805,635)	(171,234,202)	(190,654,843)	13,548,075
Transmission	(16,188,695)	213,681,240	6,188,918	6,705,837	(103,867,404)	(36,352,746)	(2,223,675)	(21,361,659)	(6,290,126)
Information Orig/Term	338,955,613	(76,126,054)	(11,952,265)	(76,056,072)	233,424	(4,652,677)	(1,051,533)	(3,030,384)	(2,518,076)
Cable & Wire	(157,132,120)	60,617,913	50,934,357	50,566,636	87,966,148	82,383,983	146,750,378	121,921,400	82,169,811
Buildings	(9,572,734)	24,427,225	267,253	1,031,373	60,307,112	1,502,403	(289,427)	(398,414)	1,651,144

CHRISTENSEN LEC TFP STUDY

Pacific Telesis  
Corrected

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	339,475,000	304,353,000	266,392,000	228,573,000	256,238,000	255,681,000	229,804,000	208,627,000	317,402,000
Central Office	369,119,000	544,479,000	392,967,000	597,217,000	356,606,000	344,324,000	509,661,000	422,176,000	430,602,000
Transmission	367,479,000	459,924,000	464,928,000	240,857,000	169,860,000	185,657,000	303,328,000	338,292,000	275,228,000
Information Orig/Term	136,175,000	101,923,000	81,881,000	78,938,000	36,453,000	38,420,000	43,236,000	51,253,000	39,351,000
Cable & Wire	470,651,000	573,402,000	451,356,000	411,272,000	336,043,000	368,439,000	459,487,000	483,528,000	455,929,000
Buildings	127,734,000	292,106,000	154,218,000	74,113,000	75,272,000	49,659,000	101,821,000	139,996,000	88,421,000

Pacific Telesis  
Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	339,475,000	304,353,000	266,392,000	228,573,000	256,238,000	255,681,000	229,804,000	191,723,000	317,402,000
Central Office	369,119,000	544,479,000	392,967,000	597,217,000	356,606,000	344,324,000	509,661,000	422,176,000	430,602,000
Transmission	367,479,000	459,924,000	464,928,000	240,857,000	169,860,000	185,657,000	303,328,000	338,292,000	275,228,000
Information Orig/Term	136,175,000	101,923,000	81,881,000	78,938,000	36,453,000	38,420,000	43,236,000	51,253,000	39,351,000
Cable & Wire	470,651,000	573,402,000	451,356,000	411,272,000	336,043,000	368,439,000	459,487,000	483,528,000	455,929,000
Buildings	127,734,000	292,106,000	154,218,000	74,113,000	75,272,000	49,659,000	101,821,000	139,996,000	88,421,000

Pacific Telesis

Difference: Corrected - Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	0	0	0	0	0	0	0	16,904,000	0
Central Office	0	0	0	0	0	0	0	0	0
Transmission	0	0	0	0	0	0	0	0	0
Information Orig/Term	0	0	0	0	0	0	0	0	0
Cable & Wire	0	0	0	0	0	0	0	0	0
Buildings	0	0	0	0	0	0	0	0	0

# CHRISTENSEN LEC TFP STUDY

## Southern New England Corrected

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	31,436,000	33,868,000	30,739,000	50,337,000	56,443,000	62,809,000	62,298,000	54,860,000	47,822,000
Central Office	89,191,000	120,313,000	166,566,000	206,002,000	114,317,000	86,554,000	110,916,000	54,362,000	65,028,000
Transmission	539,000	350,000	532,000	2,199,000	69,805,000	78,611,000	78,922,000	72,226,000	66,488,000
Information Orig/Term	849	1,026	1,157,000	1,634,000	4,013,000	3,341,000	3,762,000	2,240,000	2,946,000
Cable & Wire	65,992	65,362	75,878,000	104,097,000	88,313,000	97,981,000	92,389,000	82,806,000	90,056,000
Buildings	12,718,000	14,827,000	11,583,000	13,146,000	11,810,000	15,161,000	17,634,000	21,485,000	16,802,000

## Southern New England Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	31,436,000	33,868,000	30,739,000	50,337,000	57,277,000	74,200,000	55,511,000	57,531,000	51,069,600
Central Office	89,191,000	120,313,000	166,566,000	206,002,000	158,784,000	167,200,000	176,637,000	126,810,400	111,402,900
Transmission	539,000	350,000	532,000	2,199,000	974,000	300,000	332,000	42,900	43,200
Information Orig/Term	849	1,026	1,157,000	1,634,000	4,213,000	1,000,000	3,428,000	930,700	1,015,800
Cable & Wire	65,992	65,362	75,878,000	104,097,000	53,270,000	93,400,000	89,491,000	86,441,700	88,984,000
Buildings	12,718,000	14,827,000	11,583,000	13,146,000	13,126,000	15,000,000	19,368,000	25,552,400	22,916,100

## Southern New England Difference: Corrected - Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	0	0	0	0	(834,000)	(11,391,000)	6,787,000	(2,671,000)	(3,247,600)
Central Office	0	0	0	0	(44,467,000)	(80,646,000)	(65,721,000)	(72,448,400)	(46,374,900)
Transmission	0	0	0	0	68,831,000	78,311,000	78,590,000	72,183,100	66,444,800
Information Orig/Term	0	0	0	0	(200,000)	2,341,000	334,000	1,309,300	1,930,200
Cable & Wire	0	0	0	0	35,043,000	4,581,000	2,898,000	(3,635,700)	1,072,000
Buildings	0	0	0	0	(1,316,000)	161,000	(1,734,000)	(4,067,400)	(6,114,100)

CHRISTENSEN LEC TFP STUDY

GTE

Corrected

	Investment								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	142,017,586	216,787,187	196,878,863	253,992,447	212,586,000	227,347,000	229,539,000	229,960,000	180,086,000
Central Office	774,098,933	1,197,297,360	1,040,864,657	1,041,489,568	479,735,000	428,705,000	525,786,000	487,047,000	832,805,000
Transmission	361,489,093	215,131,975	203,253,874	208,882,285	355,504,000	291,362,000	307,154,000	335,145,000	452,402,000
Information Orig/Term	50,128,329	50,522,422	11,500,299	(15,637,564)	55,261,000	54,867,000	47,359,000	56,678,000	69,615,000
Cable & Wire	763,810,762	790,656,362	804,844,125	972,304,952	793,906,000	762,470,000	791,916,000	963,596,000	966,465,000
Buildings	62,380,092	140,467,536	176,312,968	186,857,172	102,179,000	104,831,000	85,309,000	100,539,000	94,585,000

GTE

Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	142,017,586	216,787,187	196,878,863	253,992,447	212,586,000	227,347,000	229,539,000	229,960,000	180,086,000
Central Office	774,098,933	1,197,297,360	1,040,864,657	1,041,489,568	479,735,000	428,705,000	525,786,000	487,047,000	15,623,000
Transmission	361,489,093	215,131,975	203,253,874	208,882,285	355,504,000	291,362,000	307,154,000	335,145,000	452,402,000
Information Orig/Term	50,128,329	50,522,422	11,500,299	(15,637,564)	55,261,000	54,867,000	47,359,000	56,678,000	69,615,000
Cable & Wire	763,810,762	790,656,362	804,844,125	972,304,952	793,906,000	762,470,000	791,916,000	963,596,000	966,465,000
Buildings	62,380,092	140,467,536	176,312,968	186,857,172	102,179,000	104,831,000	85,309,000	100,539,000	94,585,000

GTE

Difference: Corrected -- Original

	Additions								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gen Support Equipment	0	0	0	0	0	0	0	0	0
Central Office	0	0	0	0	0	0	0	0	817,182,000
Transmission	0	0	0	0	0	0	0	0	0
Information Orig/Term	0	0	0	0	0	0	0	0	0
Cable & Wire	0	0	0	0	0	0	0	0	0
Buildings	0	0	0	0	0	0	0	0	0



# CHRISTENSEN LEC TFP STUDY

## Corrected TPI's

	1984	1985	1986	1987	1988	1989	1990	1991	1992
General Support	100.0	99.3	97.4	98.7	101.3	100.3	98.8	90.5	84.3
Central Office/OS	100.0	99.5	97.2	98.1	96.4	96.5	96.7	95.5	92.7
Transmission	100.0	104.8	106.6	107.4	103.6	105.3	106.4	108.0	107.4
Info O/T	100.0	104.1	107.2	105.4	107.4	109.6	110.5	110.3	109.4
Cable & Wire	100.0	101.2	101.4	102.0	107.0	113.4	113.8	115.5	114.5
Buildings	100.0	102.8	105.4	107.6	111.5	113.9	117.9	121.1	124.1

## Original TPI's

	1984	1985	1986	1987	1988	1989	1990	1991	1992
General Support	100.0	98.6	97.0	97.9	102.2	100.5	98.7	90.0	83.5
Central Office/OS	100.0	99.2	97.3	99.7	97.5	97.6	99.7	97.5	95.6
Transmission	100.0	105.8	108.9	110.5	109.6	111.3	112.4	113.6	114.4
Info O/T	100.0	104.9	107.4	107.0	108.6	110.8	111.3	111.2	112.3
Cable & Wire	100.0	100.8	101.3	101.9	105.0	111.5	111.3	111.2	113.8
Buildings	100.0	103.2	106.3	108.8	112.2	114.5	118.7	122.4	125.2

## Ratio: Correctd TPI's/Original TPI's

	1984	1985	1986	1987	1988	1989	1990	1991	1992
General Support	1.00	1.01	1.00	1.01	0.99	1.00	1.00	1.01	1.01
Central Office/OS	1.00	1.00	1.00	0.98	0.99	0.99	0.97	0.98	0.97
Transmission	1.00	0.99	0.98	0.97	0.94	0.95	0.95	0.95	0.94
Info O/T	1.00	0.99	1.00	0.99	0.99	0.99	0.99	0.99	0.97
Cable & Wire	1.00	1.00	1.00	1.00	1.02	1.02	1.02	1.04	1.01
Buildings	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99

# CHRISTENSEN LEC TFP STUDY

## TELEPHONE PLANT INDEXES

Corrected TPI's		CONFIDENTIAL – NOT FOR ATTRIBUTION							
Bell Atlantic	1984	1985	1986	1987	1988	1989	1990	1991	1992
General Support	100.0	103.5	97.7	93.5	94.1	94.4	97.2	99.6	95.4
Central Office/OS	100.0	105.0	114.0	122.0	129.0	138.0	146.0	148.0	149.0
Transmission	100.0	104.0	106.0	109.0	112.0	117.0	122.0	125.0	128.0
Info O/T	100.0	104.0	104.0	104.0	108.0	114.0	118.0	124.0	127.0
Cable & Wire	100.0	104.0	103.0	108.0	114.0	122.0	123.0	128.0	131.0
Buildings	100.0	103.0	106.0	109.0	114.0	120.0	127.0	133.0	137.0
Original TPI's									
Bell Atlantic	1984	1985	1986	1987	1988	1989	1990	1991	1992
General Support	100.0	102.8	97.4	95.3	95.2	92.9	94.4	99.2	95.3
Central Office/OS	100.0	105.0	114.0	122.0	129.0	138.0	146.0	148.0	147.9
Transmission	100.0	104.0	106.0	109.0	112.0	117.0	122.0	125.0	128.0
Info O/T	100.0	104.0	104.0	104.0	108.0	114.0	118.0	124.0	127.0
Cable & Wire	100.0	104.0	103.0	108.0	114.0	122.0	123.0	128.0	131.0
Buildings	100.0	103.0	106.0	109.0	114.0	120.0	127.0	133.0	137.0
Ratio: Correctd TPI's/Original TPI's									
Bell Atlantic	1984	1985	1986	1987	1988	1989	1990	1991	1992
General Support	1.00	1.01	1.00	0.98	0.99	1.02	1.03	1.00	1.00
Central Office/OS	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.01
Transmission	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Info O/T	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Cable & Wire	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Buildings	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

# CHRISTENSEN LEC TFP STUDY

## CONFIDENTIAL – NOT FOR ATTRIBUTION

Corrected TPI's Southwestern Bell	1984	1985	1986	1987	1988	1989	1990	1991	1992
General Support	100.0	102.8	95.8	98.3	103.0	95.1	98.8	91.7	93.3
Central Office/OS	100.0	92.2	83.9	83.5	78.5	73.1	76.9	78.8	90.7
Transmission	100.0	100.2	104.3	98.6	94.3	95.8	96.5	101.3	103.7
Info O/T	100.0	102.2	103.8	104.3	101.2	103.3	101.9	103.3	103.0
Cable & Wire	100.0	99.1	99.8	99.2	101.6	105.6	105.7	119.2	107.6
Buildings	100.0	102.7	106.7	109.7	112.4	116.9	119.2	119.6	121.9
Original TPI's Southwestern Bell	1984	1985	1986	1987	1988	1989	1990	1991	1992
General Support	100.0	102.8	95.8	98.3	103.0	95.1	98.8	91.4	93.4
Central Office/OS	100.0	92.2	83.9	83.5	78.5	73.1	76.9	80.0	80.5
Transmission	100.0	100.2	104.3	98.6	94.3	95.8	96.5	97.8	100.2
Info O/T	100.0	102.2	103.8	104.3	101.2	103.3	101.9	105.5	109.3
Cable & Wire	100.0	99.1	99.7	99.2	101.6	105.6	105.7	106.3	113.3
Buildings	100.0	102.7	106.7	109.7	112.4	116.9	119.2	121.9	121.7
Ratio: Correctd TPI's/Original TPI's Southwestern Bell	1984	1985	1986	1987	1988	1989	1990	1991	1992
General Support	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Central Office/OS	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.13
Transmission	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.03
Info O/T	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.94
Cable & Wire	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.12	0.95
Buildings	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.00

# CORRECTED AND ORIGINAL LABOR AND MATERIALS EXPENSE

## Labor

	Corrected	Original	Corrected/Orig
1984	22,413,559,353	22,006,884,562	1.018
1985	22,340,695,821	22,048,422,743	1.013
1986	21,927,445,357	21,665,458,184	1.012
1987	21,867,842,254	21,616,639,527	1.012
1988	22,019,313,282	21,693,221,282	1.015
1989	22,103,815,226	21,745,668,226	1.016
1990	22,470,471,358	22,084,514,358	1.017
1991	23,105,953,636	22,713,252,636	1.017
1992	22,940,901,651	22,800,785,651	1.006

## Materials Expense

	Corrected	Original	Corrected/Orig
1984	11,076,707,400	11,483,382,191	0.965
1985	12,064,691,602	12,356,964,680	0.976
1986	12,570,617,420	12,832,604,593	0.980
1987	12,216,314,259	12,467,516,986	0.980
1988	16,499,348,718	16,825,440,718	0.981
1989	18,344,548,774	18,702,695,774	0.981
1990	18,820,686,642	19,206,643,642	0.980
1991	19,996,228,364	20,388,929,364	0.981
1992	19,503,566,349	19,643,682,349	0.993

## Labor + Materials Expense

	Corrected	Original	Corrected/Orig
1984	33,490,266,753	33,490,266,753	1.000
1985	34,405,387,423	34,405,387,423	1.000
1986	34,498,062,777	34,498,062,777	1.000
1987	34,084,156,513	34,084,156,513	1.000
1988	38,518,662,000	38,518,662,000	1.000
1989	40,448,364,000	40,448,364,000	1.000
1990	41,291,158,000	41,291,158,000	1.000
1991	43,102,182,000	43,102,182,000	1.000
1992	42,444,468,000	42,444,468,000	1.000

**CORRECTED AND ORIGINAL LABOR AND MATERIALS EXPENSE**

	US WEST								
	1984	1985	1986	1987	1988	1989	1990	1991	1992
Corrected Wages and Salaries	2,023,793,000	2,054,710,000	1,973,288,000	1,963,248,000	1,983,817,000	2,016,676,000	1,973,173,000	1,991,042,000	2,050,644,000
Corrected Fringes	615,489,907	603,384,554	612,561,835	395,535,143	445,167,000	427,205,000	417,609,000	492,679,000	569,949,000
Corrected Total Compensation	2,639,282,907	2,658,094,554	2,585,849,835	2,358,783,143	2,428,984,000	2,443,881,000	2,390,782,000	2,483,721,000	2,620,593,000
Original Wages and Salaries	1,709,400,000	1,828,437,000	1,773,167,124	1,753,959,535	1,798,890,000	1,774,395,000	1,727,623,000	1,760,637,000	1,776,071,000
Original Fringes	523,208,116	537,384,476	550,695,538	353,620,881	304,002,000	311,339,000	277,202,000	330,383,000	704,406,000
Original Total Compensation	2,232,608,116	2,365,821,476	2,323,862,662	2,107,580,416	2,102,892,000	2,085,734,000	2,004,825,000	2,091,020,000	2,480,477,000
DIFFERENCE	406,674,791	292,273,078	261,987,173	251,202,727	326,092,000	358,147,000	385,957,000	392,701,000	140,116,000

## CORRECTED AND ORIGINAL MATERIALS EXPENSE

Materials Expense		
	Corrected	Original
1984	11,076,707,400	11,483,382,191
1985	12,064,691,602	12,356,964,680
1986	12,570,617,420	12,832,604,593
1987	12,216,314,259	12,467,516,986
1988	16,499,348,718	16,825,440,718
1989	18,344,548,774	18,702,695,774
1990	18,820,686,642	19,206,643,642
1991	19,996,228,364	20,388,929,364
1992	19,503,566,349	19,643,682,349

Capital to Expense Shift		
	Corrected	Original
1984	1,694,034,541	1,694,930,416
1985	1,985,079,714	1,944,403,387
1986	1,959,363,711	1,991,387,103
1987	1,908,791,665	1,935,517,233

### Materials Expense Adjusted for Capital to Expense Shift and Nonregulated Expenses

	Corrected	Original	Corrected/Orig
1984	13,000,966,614	13,408,537,280	0.970
1985	14,456,657,719	14,708,254,470	0.983
1986	15,001,093,203	15,295,103,768	0.981
1987	15,214,675,926	15,492,604,221	0.982
1988	16,499,348,718	16,825,440,718	0.981
1989	18,344,548,774	18,702,695,774	0.981
1990	18,820,686,642	19,206,643,642	0.980
1991	19,996,228,364	20,388,929,364	0.981
1992	19,503,566,349	19,643,682,349	0.993

# CORRECTED AND ORIGINAL MATERIALS EXPENSE

Materials Expense		
	Corrected	Original
1984	11,076,707,400	11,483,382,191
1985	12,064,691,602	12,356,964,680
1986	12,570,617,420	12,832,604,593
1987	12,216,314,259	12,467,516,986
1988	16,499,348,718	16,825,440,718
1989	18,344,548,774	18,702,695,774
1990	18,820,686,642	19,206,643,642
1991	19,996,228,364	20,388,929,364
1992	19,503,566,349	19,643,682,349
	7.07%	6.71%

Capital to Expense Shift		
	Corrected	Original
1984	1,694,034,541	1,694,930,416
1985	1,985,079,714	1,944,403,387
1986	1,959,363,711	1,991,387,103
1987	1,908,791,665	1,935,517,233

Corrected Materials Adjusted for Cap/Exp and Nonreg			Original Materials Adjusted for Cap/Exp and Nonreg		
	Amount	Growth		Amount	Growth
1984	13,000,966,614			13,408,537,280	
1985	14,456,657,719	10.61%		14,708,254,470	9.25%
1986	15,001,093,203	3.70%		15,295,103,768	3.91%
1987	15,214,675,926	1.41%		15,492,604,221	1.28%
1988	16,499,348,718	8.11%		16,825,440,718	8.25%
1989	18,344,548,774	10.60%		18,702,695,774	10.58%
1990	18,820,686,642	2.56%		19,206,643,642	2.66%
1991	19,996,228,364	6.06%		20,388,929,364	5.97%
1992	19,503,566,349	-2.49%		19,643,682,349	-3.72%
Avg 84-92		5.07%			4.77%

# CORRECTED AND ORIGINAL BILLED REVENUE

Intrastate Access - Billed Revenues	1984	1985	1986	1987	1988	1989	1990	1991	1992
TOTAL - Corrected	\$5,474,681,595	\$5,836,195,769	\$5,795,046,604	\$5,844,936,227	\$5,928,082,901	\$5,938,211,401	\$5,838,883,509	\$5,891,410,095	\$5,787,327,617
TOTAL - Original	\$5,184,870,597	\$5,836,195,651	\$5,737,757,249	\$5,844,936,230	\$5,620,933,674	\$5,704,480,581	\$5,594,502,844	\$5,501,128,924	\$5,401,267,948
Difference	(289,810,998)	(118)	(57,289,355)	3	(307,149,227)	(233,730,820)	(244,380,665)	(390,281,171)	(386,059,669)
Growth - Corrected		6.4%	-0.7%	0.9%	1.4%	0.2%	-1.7%	0.9%	-1.8%
Growth - Original		11.8%	-1.7%	1.9%	-3.9%	1.5%	-1.9%	-1.7%	-1.8%
Long Distance - Billed Revenues	1984	1985	1986	1987	1988	1989	1990	1991	1992
TOTAL - Corrected	\$11,101,053,293	\$10,954,863,967	\$11,716,681,029	\$12,390,283,479	\$13,013,853,303	\$13,344,223,799	\$13,183,983,706	\$12,579,895,450	\$12,083,024,023
TOTAL - Original	\$10,575,862,498	\$10,569,610,550	\$11,346,652,417	\$12,009,990,785	\$12,738,375,742	\$13,182,085,924	\$13,053,921,201	\$12,568,752,151	\$12,205,396,093
Difference	(525,190,795)	(385,253,417)	(370,028,612)	(380,292,694)	(275,477,561)	(162,137,875)	(130,062,505)	(11,143,299)	122,372,070
Growth - Corrected		-1.3%	6.7%	5.6%	4.9%	2.5%	-1.2%	-4.7%	-4.0%
Growth - Original		-0.1%	7.1%	5.7%	5.9%	3.4%	-1.0%	-3.8%	-2.9%



## COMPOSITE AND BELL SOUTH BILLED REVENUE

CONFIDENTIAL - NOT FOR ATTRIBUTION

## COMPARISON OF CORRECTED AND ORIGINAL BILLED REVENUE DATA, 1984 - 1992

	1984	1985	1986	1987	1988	1989	1990	1991	1992
<b>Intrastate Access - Billed Revenues</b>									
BellSouth - Corrected	765,545,160	759,493,183	852,769,128	856,488,672	876,047,067	855,624,589	895,719,469	909,759,501	869,665,028
BellSouth - Original	\$475,734,162	\$759,493,085	\$795,479,773	\$856,488,675	\$568,897,840	\$621,893,769	\$651,338,804	\$519,478,330	\$483,605,359
Difference	(289,810,998)	(118)	(57,289,355)	3	(307,149,227)	(233,730,820)	(244,380,665)	(390,281,171)	(386,059,669)
TOTAL - Corrected	\$5,474,681,595	\$5,836,195,769	\$5,795,046,804	\$5,844,936,227	\$5,928,082,901	\$5,938,211,401	\$5,838,883,509	\$5,891,410,095	\$5,787,327,617
TOTAL - Original	\$5,184,870,597	\$5,836,195,651	\$5,737,757,249	\$5,844,936,230	\$5,620,933,674	\$5,704,480,581	\$5,594,502,844	\$5,501,128,924	\$5,401,287,948
Difference	(289,810,998)	(118)	(57,289,355)	3	(307,149,227)	(233,730,820)	(244,380,665)	(390,281,171)	(386,059,669)
Growth - Corrected		6.4%	-0.7%	0.9%	1.4%	0.2%	-1.7%	0.9%	-1.8%
Growth - Original		11.8%	-1.7%	1.9%	-3.9%	1.5%	-1.9%	-1.7%	-1.8%
<b>Long Distance - Billed Revenues</b>									
BellSouth - Corrected	\$1,563,348,795	\$1,387,923,417	\$1,477,737,612	\$1,585,198,694	\$1,686,506,561	\$1,651,924,875	\$1,621,721,505	\$1,472,370,289	\$1,295,944,930
BellSouth - Original	\$1,038,158,000	\$1,002,670,000	\$1,107,709,000	\$1,204,906,000	\$1,411,029,000	\$1,489,787,000	\$1,491,659,000	\$1,461,227,000	\$1,418,317,000
Difference	(525,190,795)	(385,253,417)	(370,028,612)	(380,292,694)	(275,477,561)	(162,137,875)	(130,062,505)	(11,143,299)	122,372,070
TOTAL - Corrected	\$11,101,053,293	\$10,954,863,967	\$11,716,681,029	\$12,390,283,479	\$13,013,853,303	\$13,344,223,799	\$13,183,983,706	\$12,579,895,450	\$12,083,024,023
TOTAL - Original	\$10,575,882,498	\$10,569,610,550	\$11,346,652,417	\$12,009,990,785	\$12,738,375,742	\$13,182,085,924	\$13,053,921,201	\$12,568,752,151	\$12,205,398,093
Difference	(525,190,795)	(385,253,417)	(370,028,612)	(380,292,694)	(275,477,561)	(162,137,875)	(130,062,505)	(11,143,299)	122,372,070
Growth - Corrected		-1.3%	6.7%	5.6%	4.9%	2.5%	-1.2%	-4.7%	-4.0%
Growth - Original		-0.1%	7.1%	5.7%	5.9%	3.4%	-1.0%	-3.8%	-2.9%